



# WUHAN KLEADER MULTIMEDIA CO.,LTD

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**Transparent OLED screen**

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Product introduction

WUHAN KLEADER MULTIMEDIA CO.,LTD



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**Corporate  
Mission**

**Do each one well**

**Corporate  
purpose**

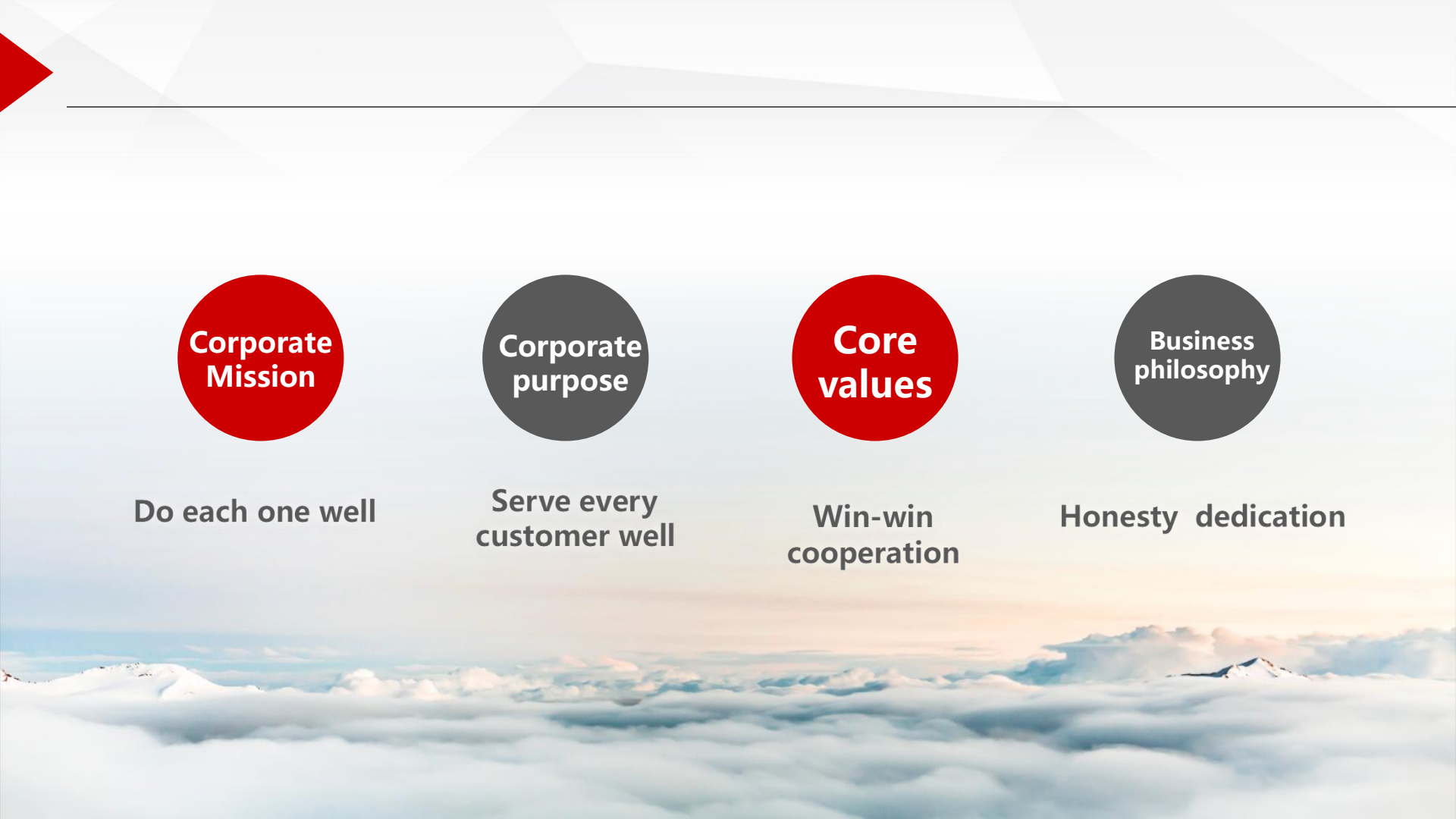
**Serve every  
customer well**

**Core  
values**

**Win-win  
cooperation**

**Business  
philosophy**

**Honesty dedication**







01

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# Product principle

Transparent OLED screen principle



# Principle of the product

OLED (organic light-emitting diode) Display technology is different from the traditional LCD display; OLED is pixel self-luminous technology, no backlight. Using very thin organic coatings and glass substrates, these organic materials glow when an electric current passes through them. Because each pixel can be turned on and off independently, the result is a stunning black display. Enhance the depth of color through the details of each pixel, making the picture colorful. Also, OLED displays are lighter, thinner, and have a larger viewing angle, significantly saving power.





# Principle of the product

Transparent OLED Display Resolution 1920 \* 1080, transparency 43% , hardware configuration using color self-developed OLED Special Drive Integrated Circuit System:

The biggest problems with OLED screens are burns and Blur, so we do a lot of protection for ease of use:

1. There were two types of compensation for an OLED screen. The first was JB Compensation. The process was that the screen would go black, and then a white line would appear. After scanning from top to bottom, the screen would restart automatically. The second was normal residual compensation, menu options for OLED compensation. The compensation process is black, the user can not see the screen, the process about 2-3 minutes, compensation will be automatically restarted;
2. The compensation in the menu is manual compensation, the user can not operate, because the software itself has the automatic operation of these compensation. JB compensation, according to LG's recommendations, JB Compensation is the screen work 800 hours, will be automatically compensated once;
3. OLED also has the self-protection mechanism, this protection measure, represents the procedure intelligence, does not need the user to operate, the entire process procedure will run by itself;
4. After the cumulative screen power-on time of 4/8 hours, the program will automatically power-off into repair mode (red and blue lights flashing alternately) for two minutes, repair will be completed automatically power-on screen.



# Principle of the product



## Transparent OLED screen features

1. Inherent characteristics of OLED, high contrast, wide gamut, etc.
2. You can see the display in both directions (mirroring) .
3. Non-luminous pixels are highly transparent and can be superimposed on virtual reality.
4. Screen thickness: 3 mm
5. System: Choose Monitor, Android, PC version (one of three)
6. Touch Control: can choose infrared touch, capacitive touch (one of two options) , intelligent operation

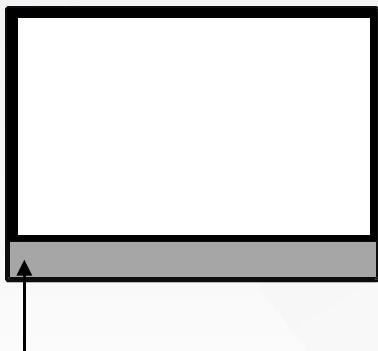
Application: widely used in exhibition, building glass, entertainment industry, medical and industrial products, party building exhibition hall, Museum, Science and Technology Museum and other fields.



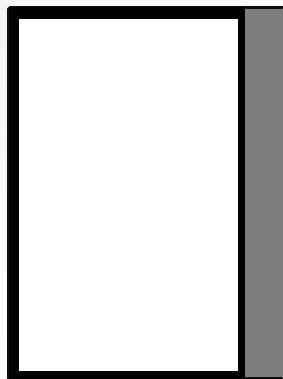
# Product concept

## Isolated type

Source/ T-Con Board

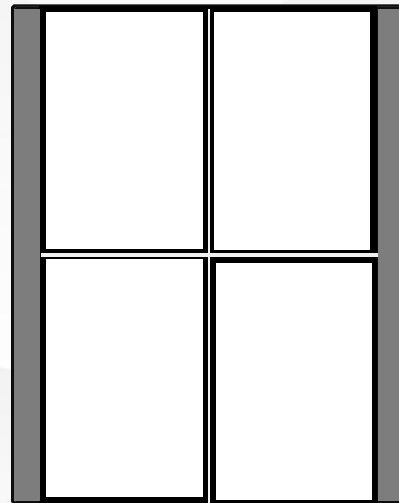


Horizontal

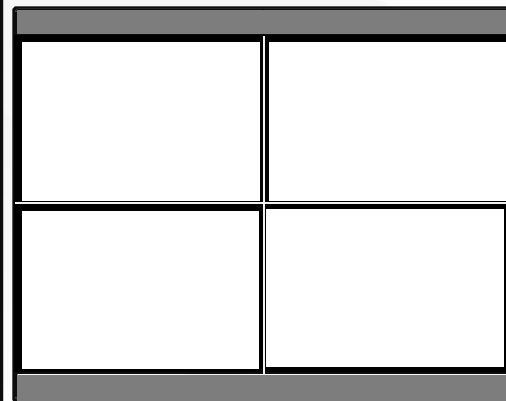


Vertical

## Splice type



Vertical  
2x2/ 2xn

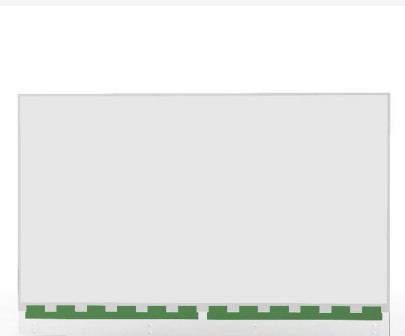


Horizontal  
2x2/ 2xn

- Suspension type
- Erect



# Product concept



Back (remove protective cover)

## ▪ High transparency solution

- Clear enough to read the fine detail or text of the object behind the display
- OLED is 43% transparent, while traditional LCD displays are only 10% transparent

## ▪ Spliced and extensible

- Self-luminescent OLED technology offers slim, stylish designs
- Separate/splice designs are available
- Vertical, horizontal, ceiling installation can be
- Truly immersive screen, integrated with the space

## ▪ Transparent OLED creates the art of light

- transparent OLED can produce AR/VR effects with appropriate lighting effects
- Ambient light affects perceived transparency

## ▪ The image quality is unmatched

- OLED technology provides both accurate and stable color
- Accurate color representation of the input signal
- Wider perspective-faster response time



# Product configuration

## Capacitance touch parameter table

Project	Parameter	Project	Parameter
Principles of technology	Double-layer bridging projective capacitor technology, wire mesh matrix instead of ITO layer, special graphics instead of traditional graphics.	Thickness of membrane body	≤100um
Product line	MM55	Light transmittance	More than 93%
Number of touch points	≤10 point	Supply voltage	5V USB
Size Range	55 inches	Mode of transmission	USB2.0, USB3.0;I2C
Touch bias	≤2mm	Transmission distance	≤5m ( Add USB signal amplifier and so on)
Number of sensors	2784	Safe distance	2mm (Refers to the distance between the LCD screen and the film)
Reporting rate	80-120point/ms	Ambient temperature	-20°C to +70°C
Energy consumption	0.5W-2W	Ambient light	Full-angle anti-strong light exposure
The type of driver	Drive-free	Touch support	Click, drag, zoom in, zoom out, rotate
Arm Reject	Support	Sensing distance	≤8mm
Support for customization	Irregular size, irregular tail flick	Calibration method	System self-calibration
Program type	Andriod①、Linux②、Windows7/8/8.1(32-bit/64-bit)③	Program level	Standard HID-USB device



# Product configuration

Table of  
Android  
system  
parameters

CPU	rock chips RK3288 The strongest four-core1.8GHz Cortex-A17 GHz GPU Mail-T764	Mipi Camera	24pin FPCInterface, Support for 1300W Camera (optional)
Memory	2G	Serial port	Default 3 TTL serial port sockets (can be changed to RS232 or 485)
Built-in memory	8G/16G	GPS	External GPS (optional)
Memory expansion	Support for TF card extensions up to 64GB	WIFI、 BT	Built-inWIFI, BT4.0
Built-inROM	2KB EEPROM	3G	Built-inWCDMA,EVDO,4GAll Net, support voice call
Decoding resolution	The highest support3840*2160	Ethernet	1↑, 10M/100M/1000M Adaptive Ethernet
The operating system	Android 6.0.1	TFcard	Support TF card
Play mode	Support cycle, timing, plug and other play mode	LVDS Output	1 single/dual, direct drive 50/60Hz LCD screen
Network support	3G, Ethernet, WiFi, Bluetooth 4.0, wireless peripherals	EDP Output	Can directly drive a variety of resolution EDP interface LCD screen
Video playback	Support for AVI (H.264、 DIVX、 DIVX、 XVID) , rm, rmvb, MKV (H.264、 DIVX、 DIVX、 XVID) , WMV, MOV, MP4 (H.264、 MPEG、 DIVX、 XVID) , DAT (VCD格式) , VOB (DVDFormat) , PMP,MPEG, .MPG,, FLV (H.263, H.264) , ASF , TS, TP, 3GP, MPGMore than 30 formats	HDMI Output	1, support 1080P@120hz, 4kx2k@60Hz output
Image format	Support for JPG, BMP, PNG, GIF and other image formats to browse and Support rotation/slide play, up to 4096 * 4096 resolution	HDMI in	HDMI input, 30pin FPC Custom Interface (optional)
The USB 2.0 interface	2 USB hosts, 4 USB sockets	Audio and video output	Support for left and right audio output, built-in dual 8R/5W power amplifier



# Product configuration

## Table of computer system parameters

Among them, configuration optional monitor version, Android version or computer version

Monitor version: HDAMI interface, users can be connected to the computer

Android version: mainly used to play video pictures mainly

Touch Android: Touch Interactive, Feel Free to edit touch interactive software

Computer version: Win7 Win10 system

System			
CPU	Integrated Intel® Corew i5-4200M Processor, PGA 946, dual-core quad-thread, 2.50GHz frequency, maximum capacitance 3.1 GHz, 3 MB SmartCache cache, TDP 37W processor		
Chipset	Inte® HM87 chipset/intel HM86 chipset (USB3.0 capable)		
Graphic Interface	Discrete graphics cards are supported, and Intel HD GRAPHICS (performance depends on the discrete graphics card and CPU) supports 4K UHD video playback		
memory	1xDDR3 SO 204-DIMM slot (memory supports 1.35V) supports DDR3L-1333/1600 memory, up to 32GB		
storage	2x SATA 2.0 2xMINI PCI-E ports, one of which supports M-SATA SSD interface		
Internet	Onboard Realtek RTL8111E Gigabit LAN chip		
audio	Onboard Realtek ALC662 supports 5.1 channels with HD Audio support Supports audio input and output		
Backplane I/O	1x DC IN power connector   1x HDMI port   1x VGA port   2x Dual-layer USB 3.0 ports 1X LAN_RJ interface   1x MIC (input)   1x PHONE (Output)		
Onboard	1xDC-powered 4Pin connector 2x7pin SATA 2.0 1xLVDS interface 1 x LVDS power supply connector 2xUSB2.0 pins (4 can be connected.)	1x front panel pins 1x VGA_H pins 2xCOM pin header USB2.0 ports) 1x backlit power supply connector	1X HDMI Pin 1x SATA power pins 1 x audio pin 1x CPU fan power socket 1x system fan power supply socket



02

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# **Product introduction-**

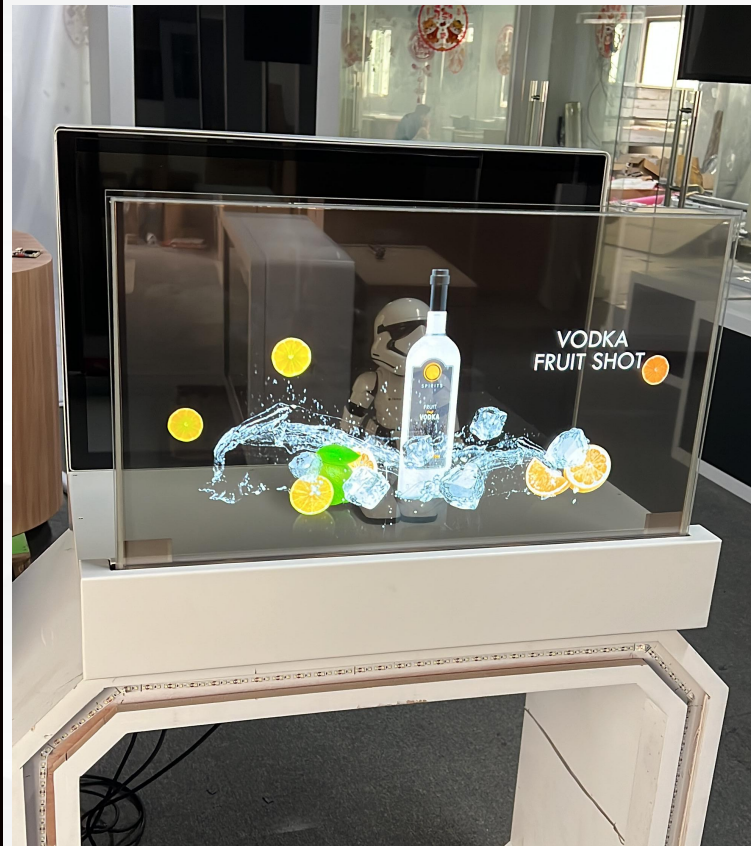
## **30-inch transparent OLED**



# 30-inch transparent OLED

Table of  
screen  
parameters

Screen size	30inch (16: 9)
Models	LW300PXL
Pixel alignment	RGBWRectangle
Transparency	43%
Surface treatment	Hard coating (2H)
Type of display screen	OLED Screen , AM-OLED
Screen display size	664.29(W)×373.48(H) mm
Appearance size	676.09(W)×387.48(H) mm
Physical resolution	1366(RWBG)×768, WXGA, 52PPI
Display color	1.07B , 100% sRGB
Frame rate	120HZ
Display brightness	600cd/m2(Typ.)
Contrast	135000 : 1
angle of view	60/60/60/60 (Min.)(CR≥10)
aspect ratio	16: 9
Weight	1.04Kgs
Light source life	30Khours
LAMP type	Self-luminous
Surface treatment	Hard coating (2H)
Touch screen	Add capacitance
Transverse degree of flexibility	Unbending
Operating temperature	0 ~ 50 °C ; Storage temperature: -20 ~ 65 °C
Voltage Supply	12.0/24V (Typ.)(VDD/EVDD)
Response time	8 (Typ.)(G to G) ms





# Product display



Electrify the front screen



No current



# Product display

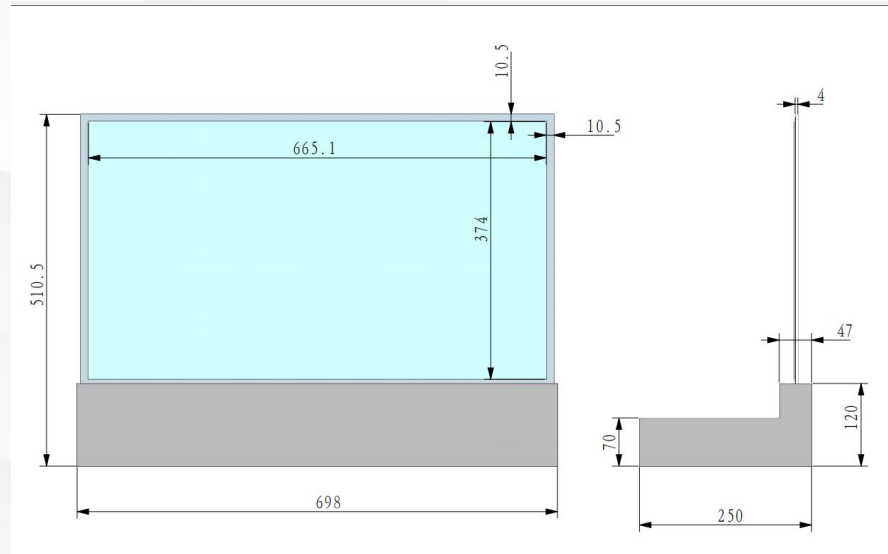
30-inch transparent OLED desktop screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application scenarios: Exhibition Hall, Bank, Museum, Science and Technology

Museum, Sales Department, Shopping Mall





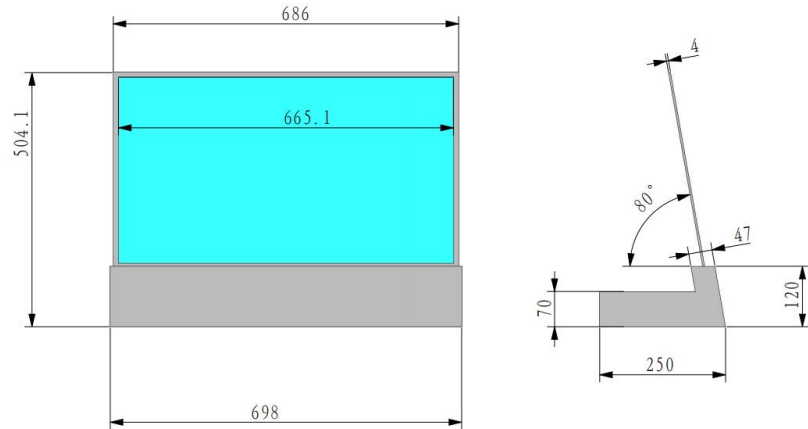
# Product display

Transparent OLED screen with 30-inch desktop bevel

Optional: No touch/ Capacitive touch

System: 1、Display version (HDMI) , 2、Android 3、Computer Systems

Application scenarios: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





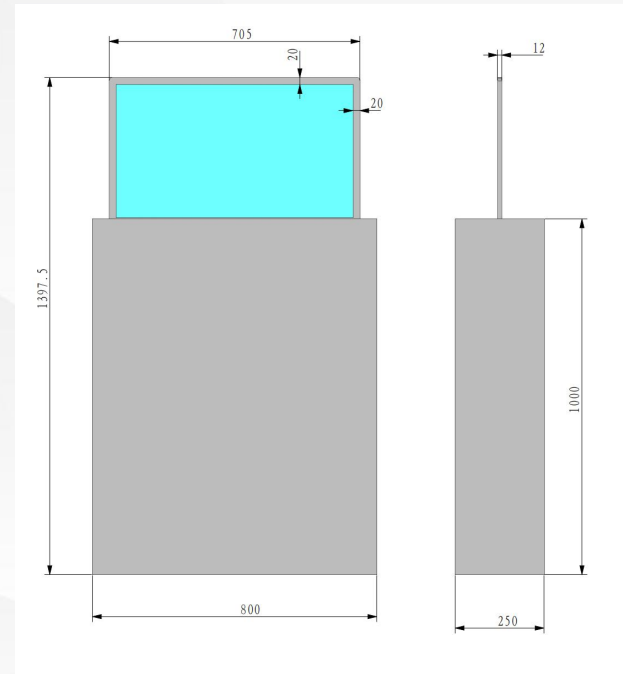
# Product display

30-inch raised and lowered transparent OLED screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application scenarios: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





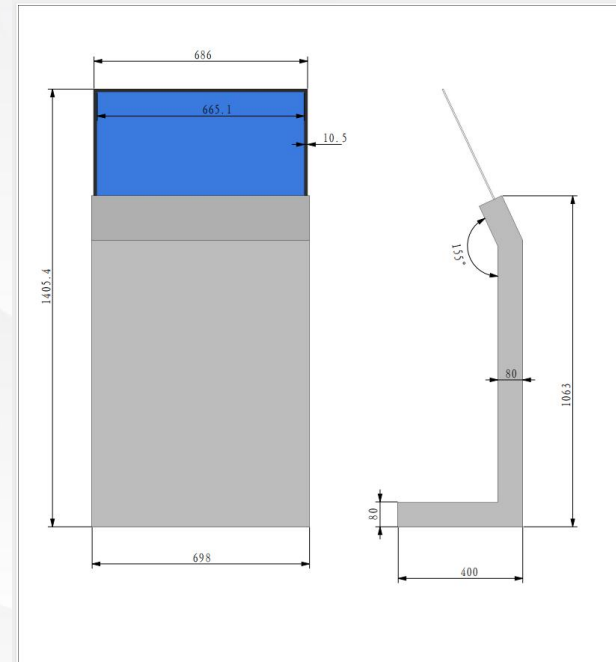
# Product display

30 inches beveled transparent OLED screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





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# **Product introduction- 55-inch transparent OLED**



# 55 inch product parameters

Table of screen parameters

Screen size	55-inch (16: 9)
Pixel alignment	RGBW Rectangle
Surface treatment	Hard coating (2H)
Transparency	43%
Support colors	1.07B , 100% sRGB
Type of display screen	OLEDscreen , AM-OLED
Screen display size	1206.5 × 678.7.4 (H×V) mm
Appearance size	1218.3 × 697.1 (H×V×D) mm
Physical resolution	1920 (H) ×1080 (V)
Display color	1.07B , 100% sRGB
Frame rate	120HZ
Display brightness	400cd/m2(Typ.)
Contrast	150000: 1
Perspective ( linear measure)	60/60/60/60 (Min.)(CR≥10)
Aspect ratio	16: 9
Weight	3.14KG
Light source life	30Khours
LAMP type	Self-luminous
Surface treatment	Hard coating (2H)
Touch screen	Can add capacitance/infrared touch
Transverse degree of flexibility	Unbending
Operating temperature	0 ~ 50 °C ; Storage temperature: -20 ~ 65 °C
Voltage Supply	12.0/24V (Typ.)(VDD/EVDD)
Response time	8 (Typ.)(G to G) ms





# Product display



Electrified state



No current



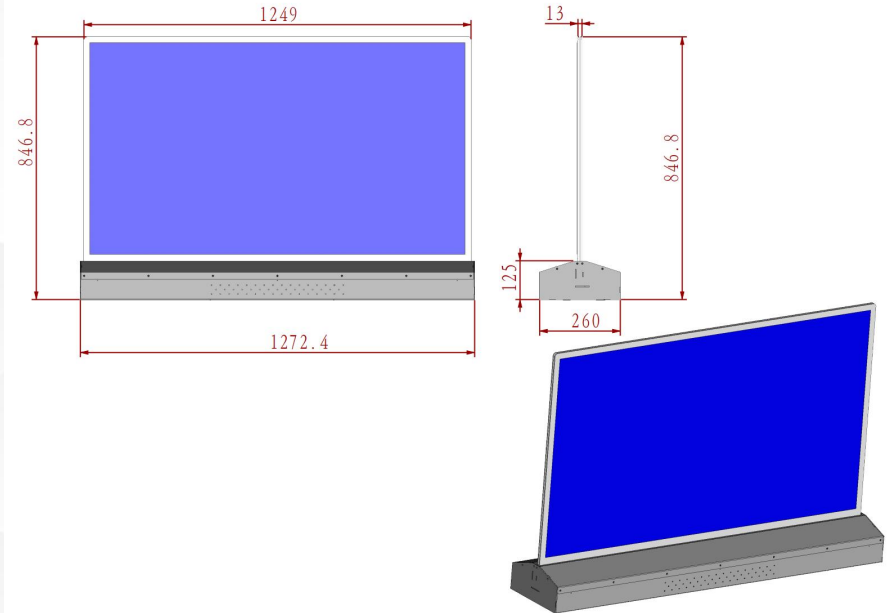
# Product display

55-inch transparent OLED desktop screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





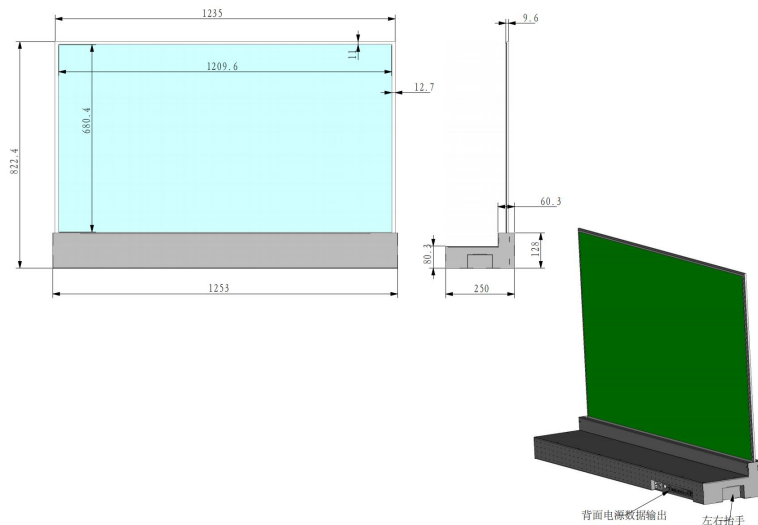
# Product display

55-inch transparent OLED desktop screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





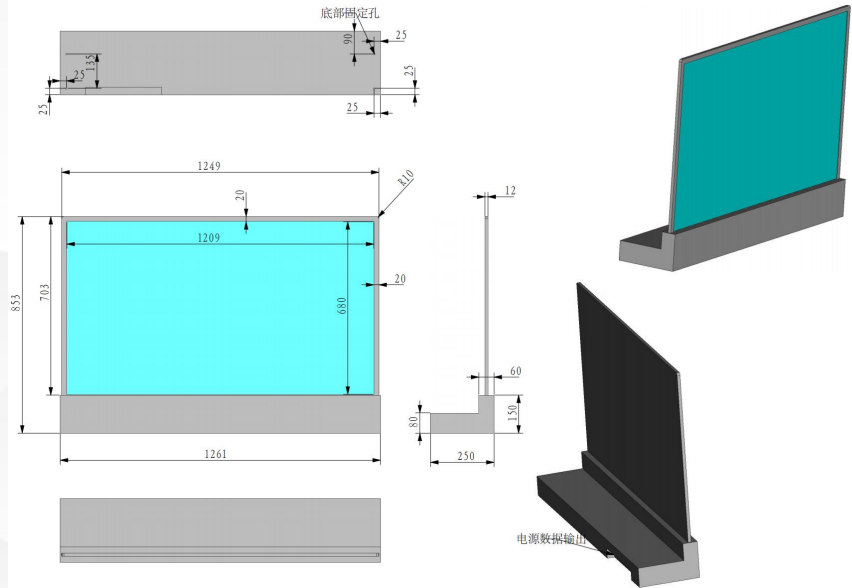
# Product display

55-inch transparent OLED desktop screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





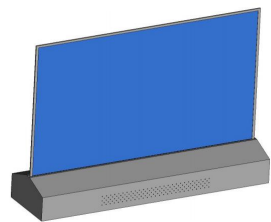
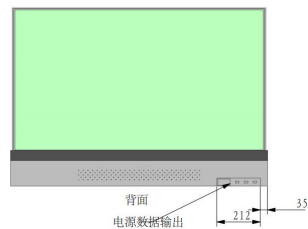
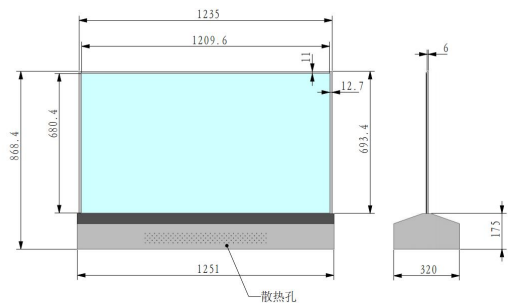
# Product display

55-inch transparent OLED desktop screen

Optional: No touch/ Capacitive touch

System: 1、Display version (HDMI) , 2、Android 3、Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





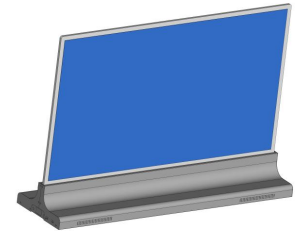
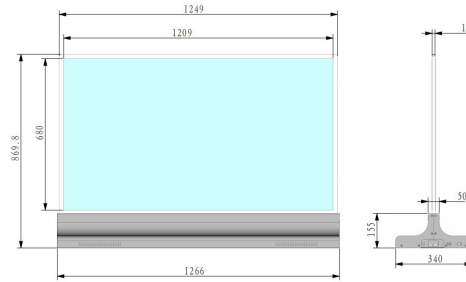
# Product display

55-inch transparent OLED desktop screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





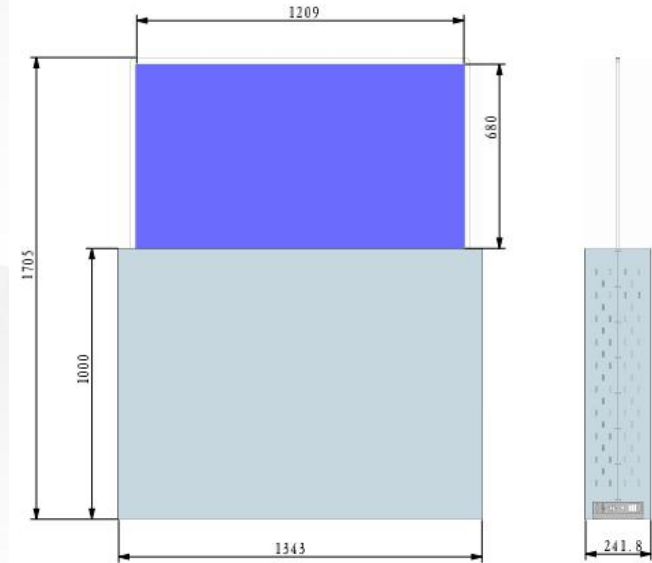
# Product display

55-inch up-and-down transparent OLED screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





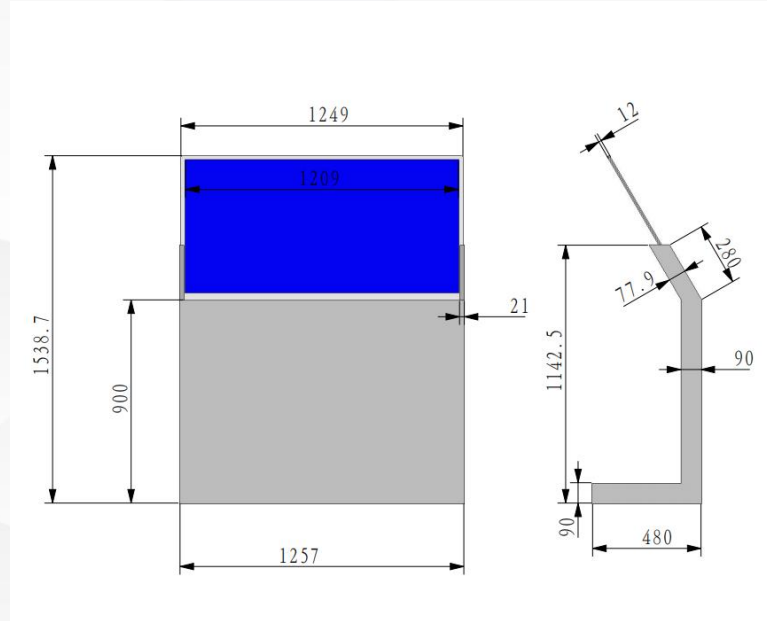
# Product display

55-inch beveled transparent OLED screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





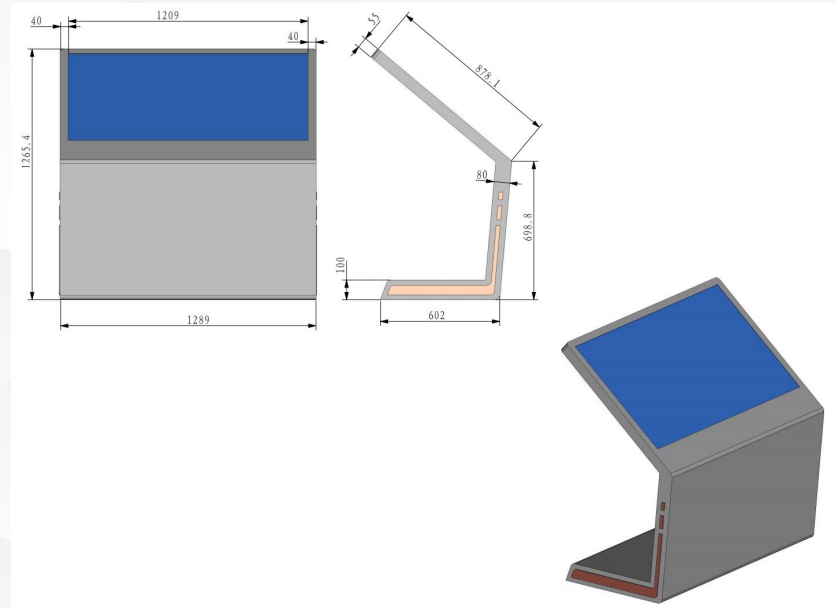
# Product display

55-inch beveled transparent OLED screen with border

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





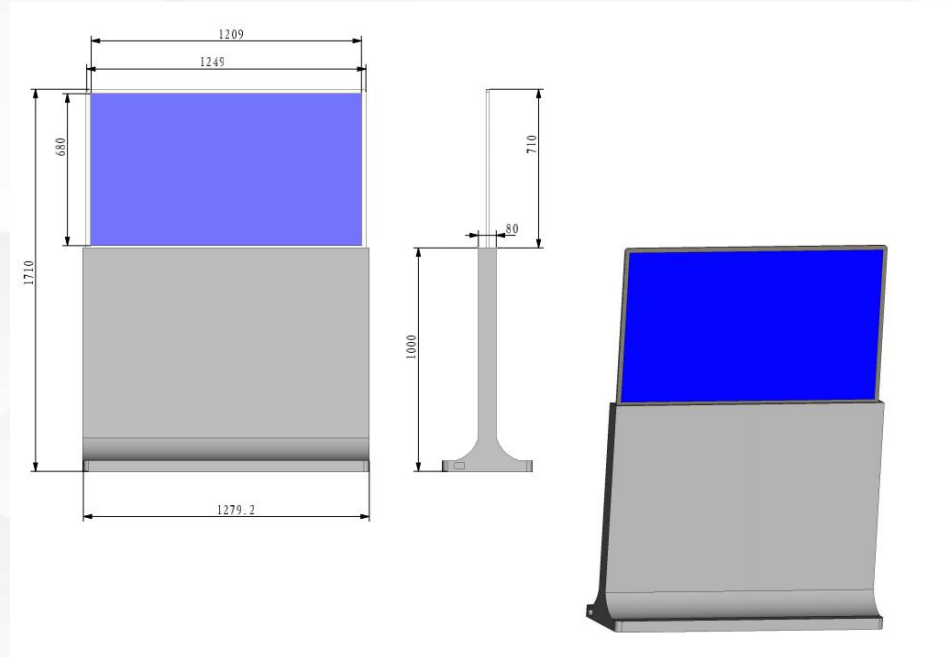
# Product display

55-inch floor-to-ceiling transparent OLED screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





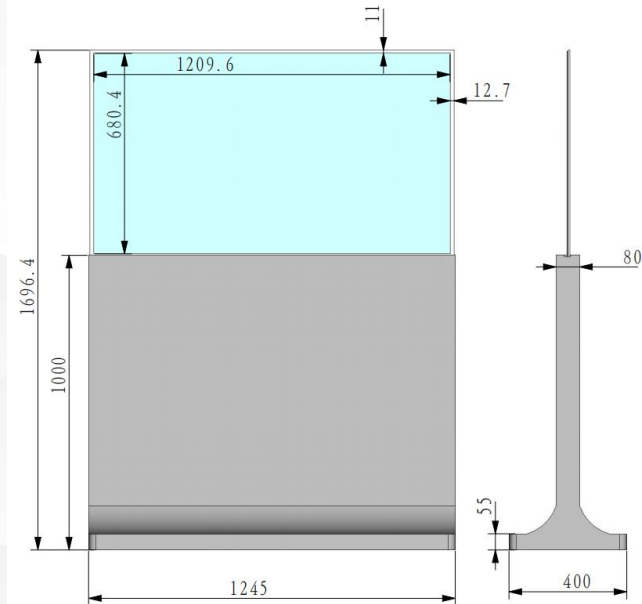
# Product display

55-inch floor-to-ceiling transparent OLED screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum. Sales Department. Shopping Mall





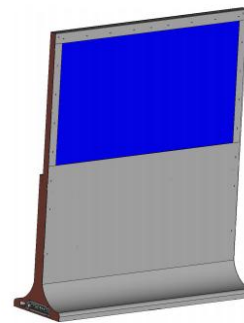
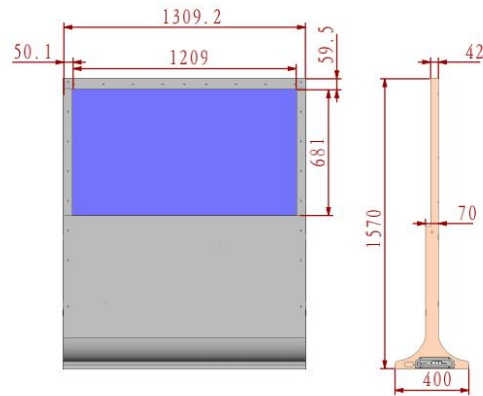
# Product display

55-inch floor-to-ceiling transparent OLED screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





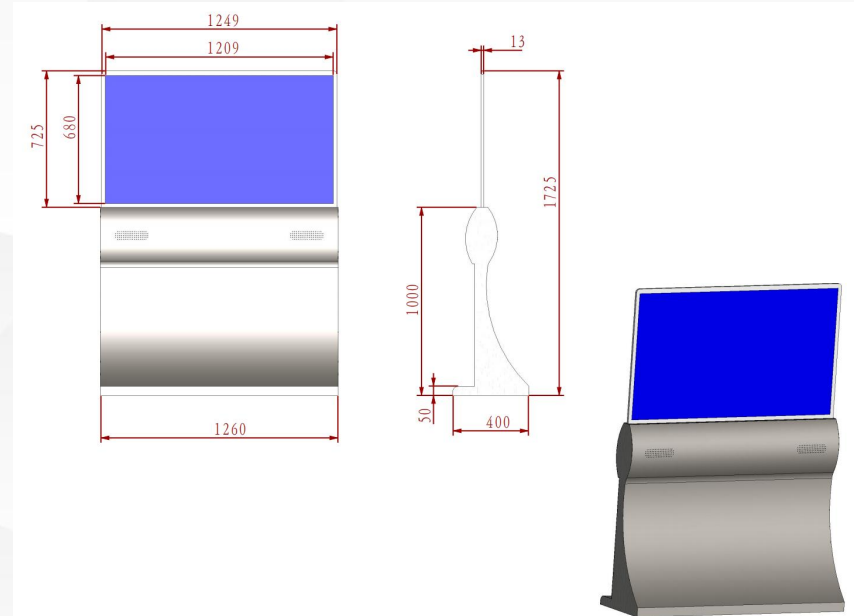
# Product display

55-inch floor-to-ceiling transparent OLED screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





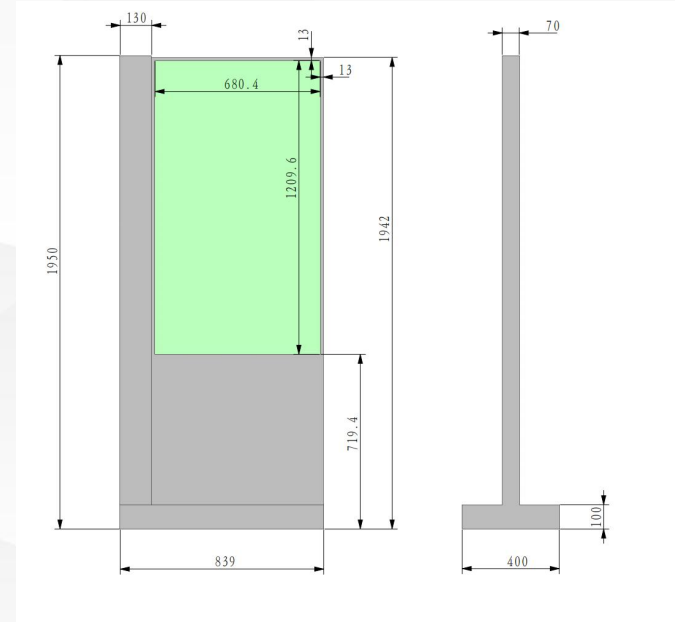
# Product display

55-inch vertical transparent OLED screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





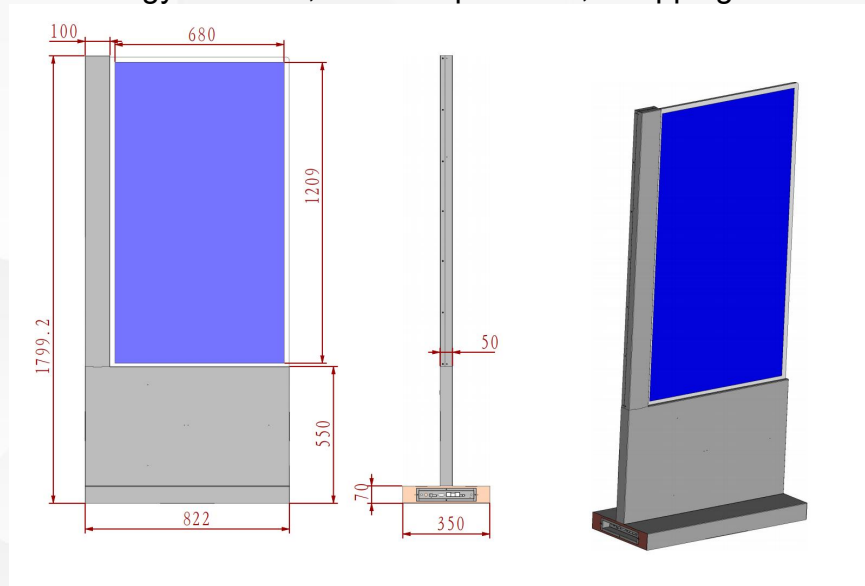
# Product display

55-inch vertical transparent OLED screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





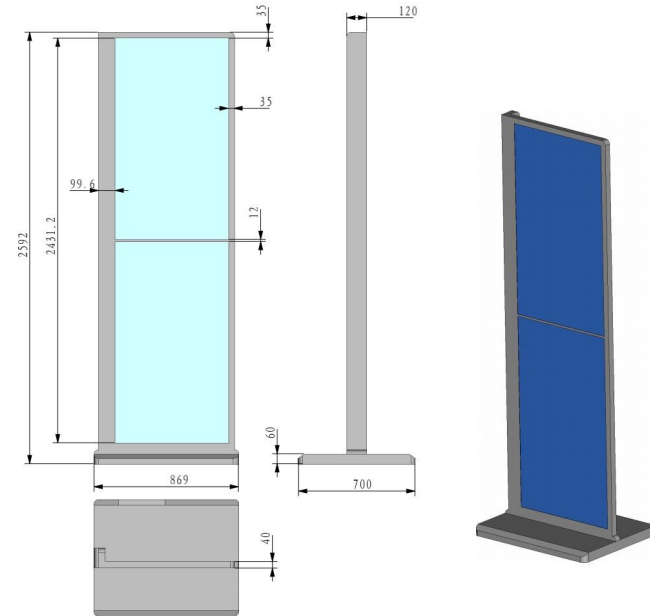
# Product display

55-inch vertical 1 \* 2 transparent OLED splicing screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





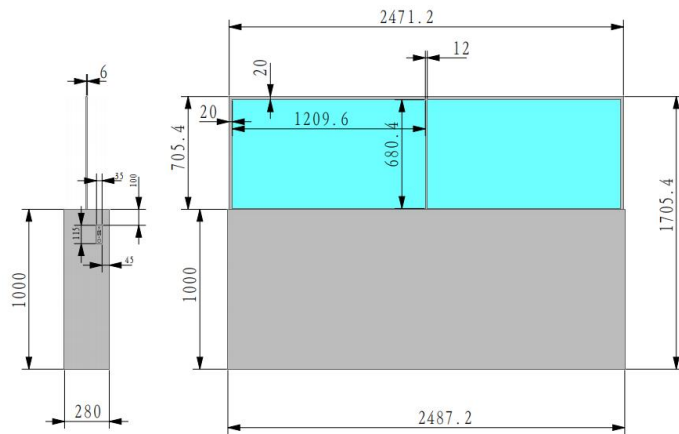
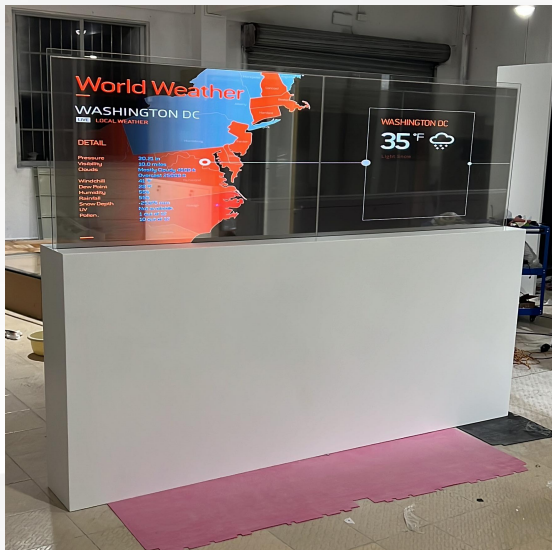
# Product display

55-inch vertical 1 \* 2 transparent OLED splicing screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





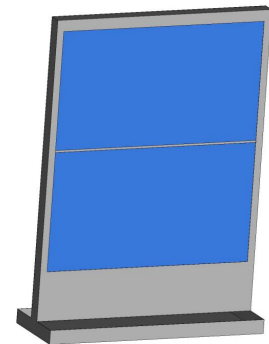
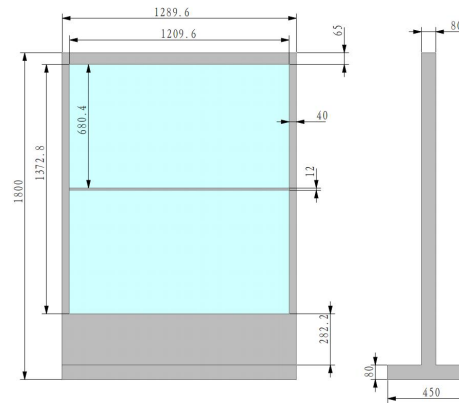
# Product display

55-inch vertical 1 \* 2 transparent OLED splicing screen

Optional: No touch/ Capacitive touch

System: 1、 Display version (HDMI) , 2、 Android 3、 Computer Systems

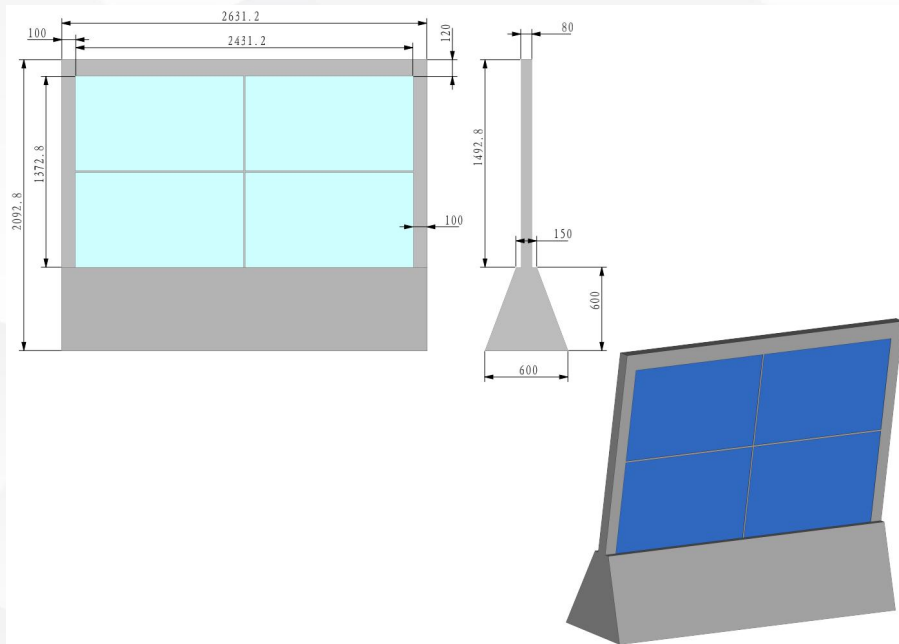
Application: Exhibition Hall, Bank, Museum, Science and Technology Museum, Sales Department, Shopping Mall





# Product display

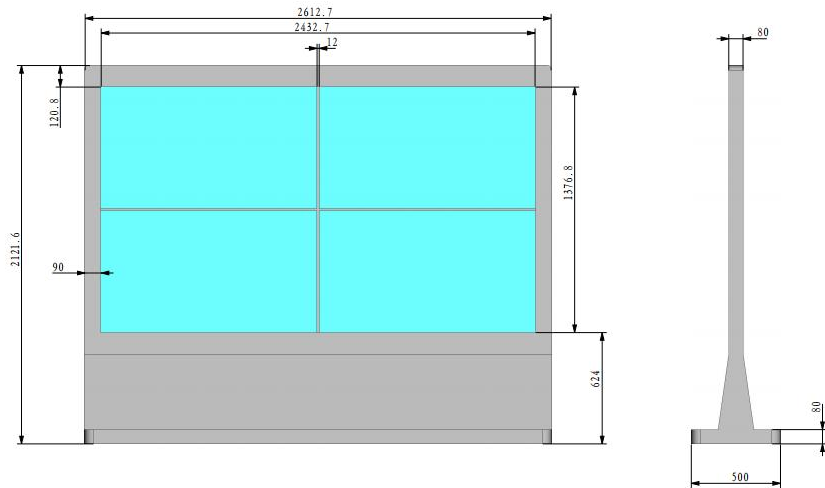
55-inch 2 \* 2 transparent OLED splice screen





# Product display

55-inch 2 \* 2 transparent OLED splice screen







04

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# **Product demonstration**



## Yili Inner Mongolia Exhibition Hall-2 sets of 2 \* 2 transparent OLED splicing screen





## Exhibition Hall of listed companies in Foshan, Guangdong - 2 \* 3 transparent OLED splice screen



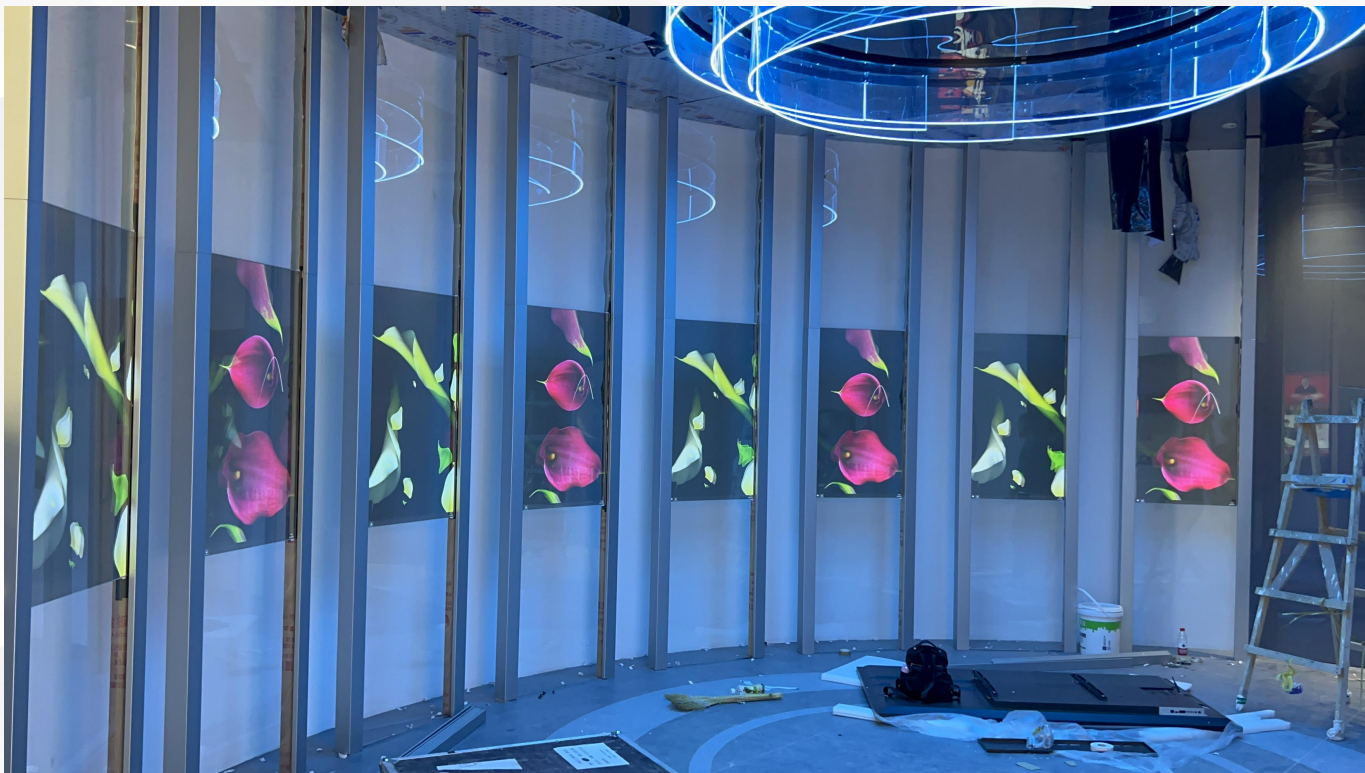


## Beijing airport apartment - 1 \* 2 movable door transparent OLED splice screen





## Wuhan-1 \* 8 transparent OLED splicing screen





## Jiangsu Wuxi 5G Laboratory-2 \* 2 touch interactive transparent OLED splicing screen





## China Institute of Popular Science-21 \* 3 transparent OLED splicing screen



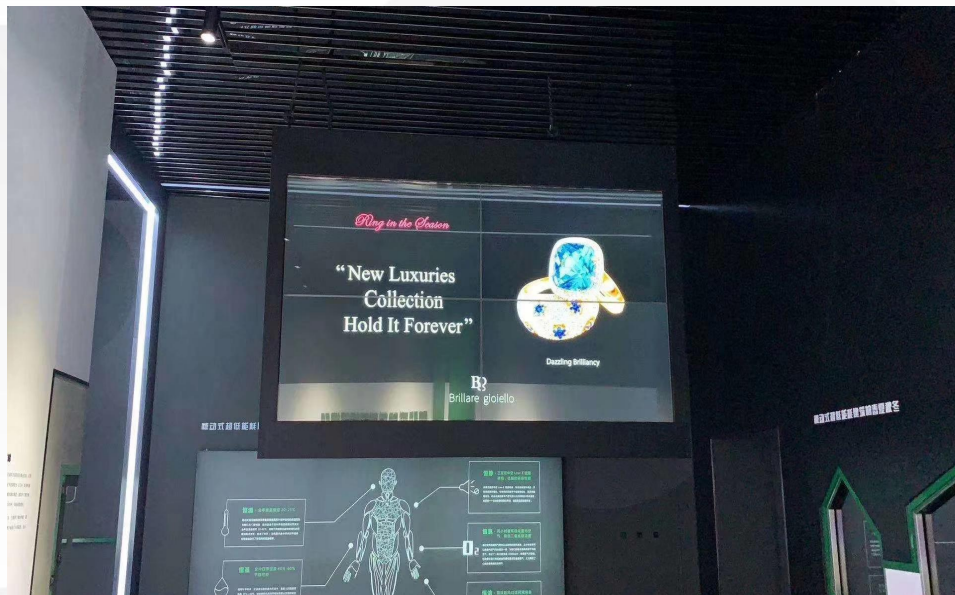


## Tongjiang Academy Scenic Area-1 \* 5 transparent OLED splicing screen





## Qingdao Longhu light year sales department-transparent OLED screen





## Signage Pu-erh tea-transparent OLED splicing screen



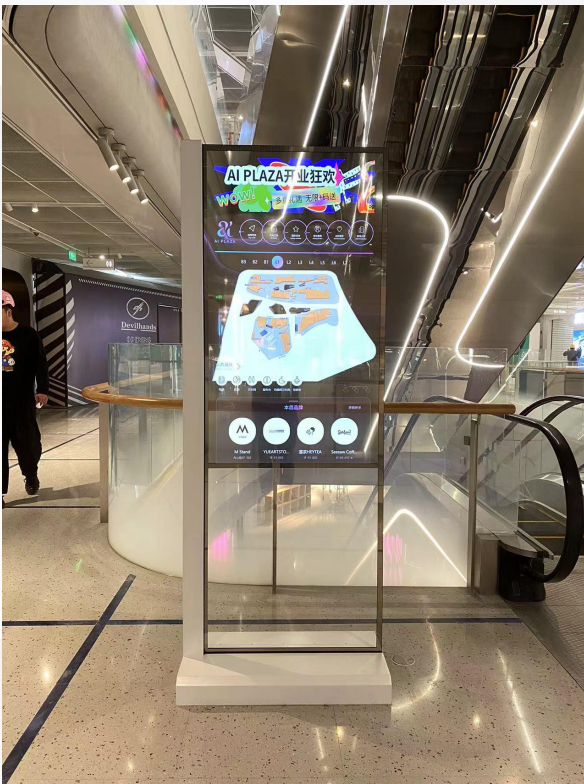


## Meeting Room of Xi'an high-speed Railway station-transparent OLED screen





## Shanghai Vanke Mall-5 transparent OLED screens





## Dongfeng Nissan Motor Show 2020-transparent OLED screen





## Hangzhou seawall site museum-transparent OLED screen



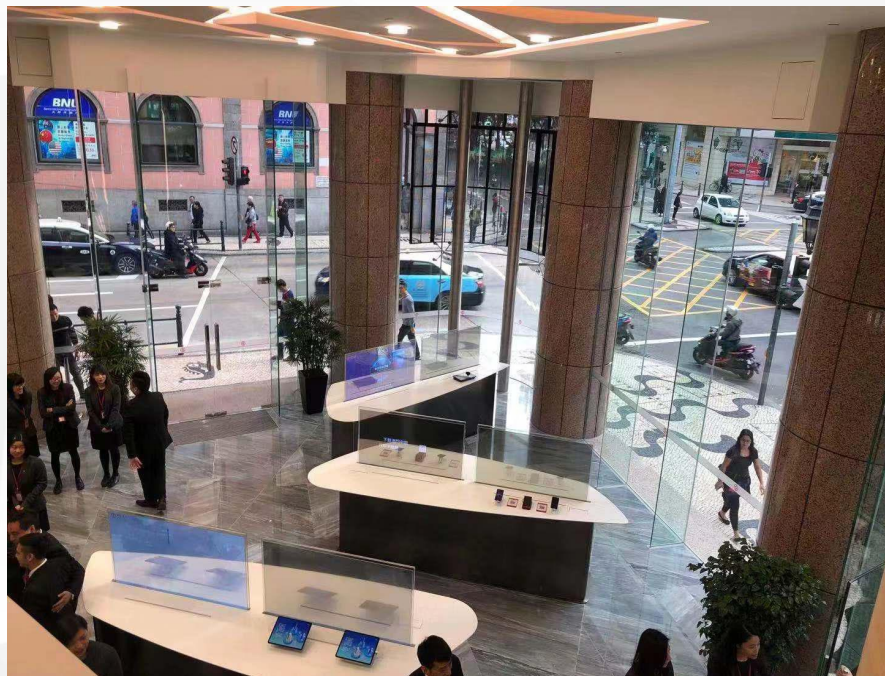


April 19, 2021 Shanghai Convention and exhibition center (MG SAIC)-transparent OLED screen





## Bank of China macau-transparent OLED screen







# THANKS